

What is claimed is:

1. A rolled web product, comprising:

(a) a core having an outer surface,

(b) a web wrapped around the core, the web having a first end
and a second end, the first end of the web being positioned adjacent the
5 outer surface of the core, and the second end of the web being
positioned on the outer circumferential surface of the roll,

(c) wherein the web is positioned upon the outer surface of the
core in a manner whereby the web is positioned in a first direction, and
also in a second and opposite direction, in alternating sequence, from
10 the first end of the web to the second end of the web.

2. The rolled web product of claim 1 in which the web is wrapped
in a first direction upon the core between about 1 and about 3
revolutions.

3. The rolled web product of claim 1 in which the web is wrapped
in a first direction upon the core between about 370 and about 720
degrees.

4. The rolled web product of claim 1 in which the web is wrapped
upon the core in a pattern resulting from oscillating revolutions about the
core, in which a tail is formed upon the web at a plurality of points
corresponding to directional changes, further wherein the tail is formed in
5 each revolution, each successive tail being secured in an overlap of the
tail of the web from a previous revolution.

5. The rolled web product of claim 4, in which the location of the overlap formed by the tail upon the outer circumferential surface of the roll is changed at least once during winding of the roll.

6. The rolled web product of claim 5 in which the amount of roll movement from one directional change to the next directional change comprises an oscillating period, further wherein the location of the tail overlap is different for each oscillating period of the roll.

7. The rolled web product of claim 1 in which the product is selected from the group of products comprising: a fibrous web, a non-fibrous web, a nonwoven web, a film, a plastic film, a non-plastic film, a foam, tape, cording, textiles, rope, and tubing.

4 8. A rolled product formed upon a collapsible airshaft, in which the collapsible airshaft forms a cylindrical-shaped center space within the rolled product, the rolled product comprising a web wrapped in a circular pattern, the web having a first end and a second end, the first end of the web being positioned adjacent the center space, and the second end of the web being positioned upon the outer circumferential surface of the roll, wherein the web is positioned in a manner whereby the web is
8 wound in both a first direction and a second opposite direction, in alternating sequence.

9. The rolled product of claim 8 in which the web is wrapped in the first direction upon the core between about 1 and about 3 revolutions.

10. The rolled product of claim 8 in which the web is wrapped in a first direction between about 370 and about 720 degrees.

11. The rolled product of claim 8 in which the web is wrapped upon in a pattern resulting from oscillating revolutions about the center space, in which a tail is formed upon the web at a plurality of points corresponding to directional changes, further wherein the tail is formed in
5 each revolution, each successive tail being secured in an overlap of the tail of the web from a previous revolution.

12. The rolled product of claim 11, in which the location of the overlap formed by the tail upon the outer circumferential surface of the roll is changed at least once during winding of the roll.

13. The rolled product of claim 12 in which the amount of roll movement from one directional change to the next directional change comprises an oscillating period, further wherein the location of the tail overlap upon the periphery of the roll is different for each oscillating
5 period of the roll.

14. A stacked roll assembly formed by combining the rolled product of claim 1, defined as the first roll, with a second rolled product.

15. The stacked roll assembly of claim 14 in which:

(a) the first roll has a first end adjacent the first core, and a second end adjacent the outer circumferential surface of the first roll,

5 (b) the second roll has a first end adjacent the second core,
and a second end adjacent the outer circumferential surface of the
second roll,

(c) further wherein the first end of the first roll is mated with
the second end of the second roll, such that when the first roll is
exhausted, the web is adapted to continue to feed from the second roll.

16. A rolled web product made by the process of winding a web
about a central axis to form a roll, comprising:

(a) providing a rotating mandrel, the rotating mandrel being
oriented along a central axis,

5 (b) providing a feeding mechanism, the feeding mechanism
comprising at least one roller for holding in a feed position a running web
to be wound upon the mandrel into a roll,

(c) providing a retainer assembly, the retainer assembly being
mounted around the roll upon the rotating mandrel,

10 (d) oscillating the rotating mandrel between a clockwise and a
counterclockwise rotational direction, while winding the web upon the
mandrel; and

(e) supporting with the retainer assembly the outer portion of the
roll during winding of the web upon the mandrel in forming a roll, the
15 retainer assembly having at least one circumferential support stay for
engagement of the web on the outer surface of the roll as the roll builds.

